

7075-T6 1.750X4.500"

Work Order ID 94459

94459

Page 1

December-19-12 11:09:01 AM

Item ID: 647.9313

Accept

N900040100

Setup Start *NS1*

Revision ID:

647.9313

Stop *NS2*

Item Name: Bracket

394459

Start Date: 1/17/13

Start Qty: 30.00

30

Cust Item ID:

Required Date: 1/17/13

Req'd Qty: 30.00

30

Customer:

Reference:

Approvals:

Process Plan: MLS

Date: 12-12-19 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.9300									
100		0.00							
100									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	CUT AT 4.0" LONG			13-2-21		30			
110		0.00							
110									
Outsource5	Memo	0.00							
Outsource process - Machining	ISSUE R/O: 19277 POSSIBLE SUPPLIER: ARCHER PRECISION Certificate of conformaty required								
115	Receive & Inspect for Damage & Mat'l Certs	0.00							
115									
Packaging	Memo	0.00							
Packaging									

30x

13-6-4

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

Work Order ID 94459

94459

Page 2

December-19-12 11:09:01 AM

Item ID: 647.9313 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bracket
 Start Date: 1/17/13 Start Qty: 30.00 *30* Cust Item ID:
 Required Date: 1/17/13 Req'd Qty: 30.00 *30* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
117 *117* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00				30 can			
118 *118* HandFinish Hand Finishing	Memo REMOVE ALL PART MARKINGS	0.00 0.00				30		7613-6-4	
120 *120* Outsource4 Outsource process - Anodize	Memo HARD ANODIZE IAW MIL-A-8625 TYPE 3 COLOUR BLACK	0.00 0.00						CZ 13/06/18	30

P/O: 20215

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

Work Order ID 94459

94459

Page 3

December-19-12 11:09:01 AM

Item ID: 647.9313

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket

Start Date: 1/17/13

Start Qty: 30.00

30

Cust Item ID:

Required Date: 1/17/13

Req'd Qty: 30.00

30

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

Receive & Inspect for Damage & Mat'l Certs

0.00

130

Packaging

Memo

0.00

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

150

Spray Painting per QSI005 4.2

0.00

150

SprayPaint

Memo

0.00

Spray Painting

PRIME AS PER DWG NOTE #2

125 452

P-13/7/17 (30)

N/A

CZ 13104/18

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
---	---	---	--	---

Work Order ID 94459

94459

Page 4

December-19-12 11:09:01 AM

Item ID: 647.9313

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket

Start Date: 1/17/13

Start Qty: 30.00

30

Cust Item ID:

Required Date: 1/17/13

Req'd Qty: 30.00

30

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC14- Inspect Spray Paint

0.00

160

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location:

0.00

170

Packaging

Memo

0.00

Packaging

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

Quality Control

AB-07-18

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Picklist Print

December-19-12 11:09:01 AM

Page 1

Work Order ID: 94459

Parent Item: 647.9313

Parent Item Name: Bracket

Start Date: 1/17/13

Required Date: 1/17/13

Start Qty: 30.00

Required Qty: 30.00

Comments: IPP REV:A NEW ISSUE 12-11-19 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.9313P		Purchased	No				Each	0.0000		30			
Bracket													
M7075T6B1.750X04.500		Purchased	No				f	12.0400		9.8526316			
7075-T6 BAR 1.750" X 4.500"													

Location

Loc Qty

Loc Code

MAT049

12.04

124030

12.04

124383

10.0

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

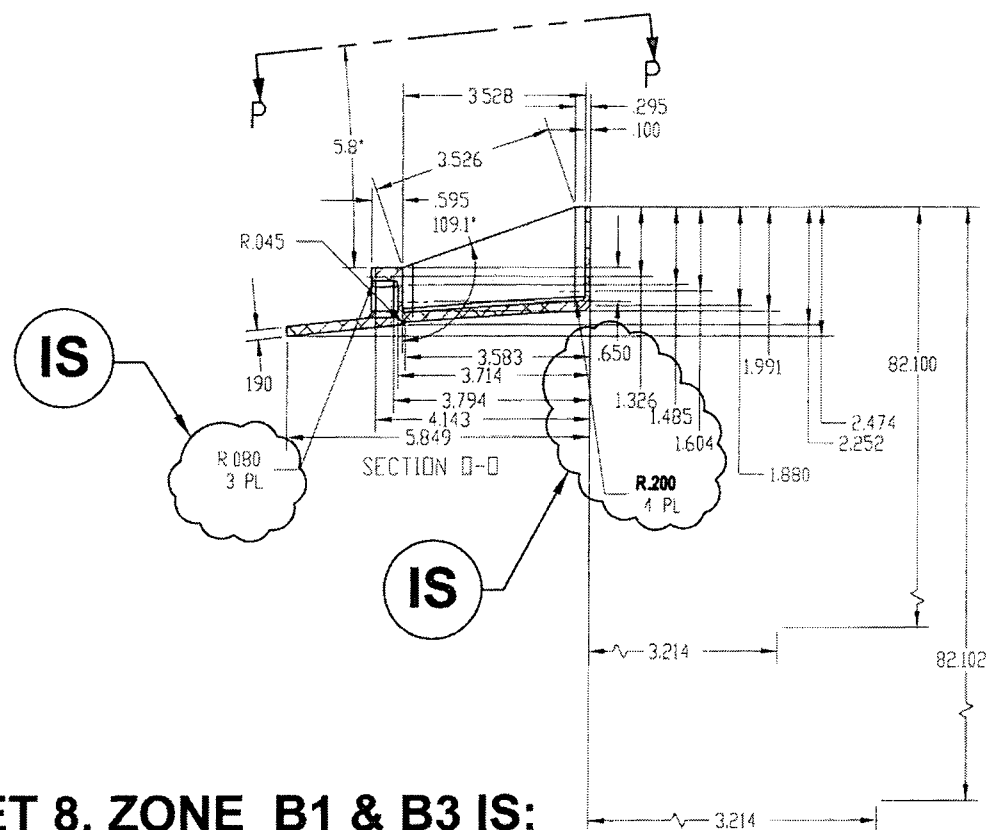
QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

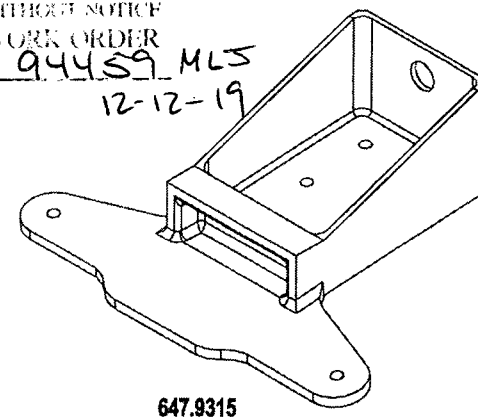
APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03706				SHEET 1 OF 2	
	DWG NO. 647.9300	REV: N/C	PREPARED BY B. PETERS	DATE: 11/16/12	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
	DWG TITLE: BRACKETS					
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED RADII ON 647.9315.				EQR: D-12-012	

SHEET 1, ZONE B4, NOTE 10 IS:

10 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9315 RECEPTACLE BRACKET.SLDPRT, LAST MODIFIED 11-16-12.



STOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 94459 MLS
12-12-19



SHEET 8, ZONE A7 IS:

SHEET 8, ZONE B1 & B3 IS:

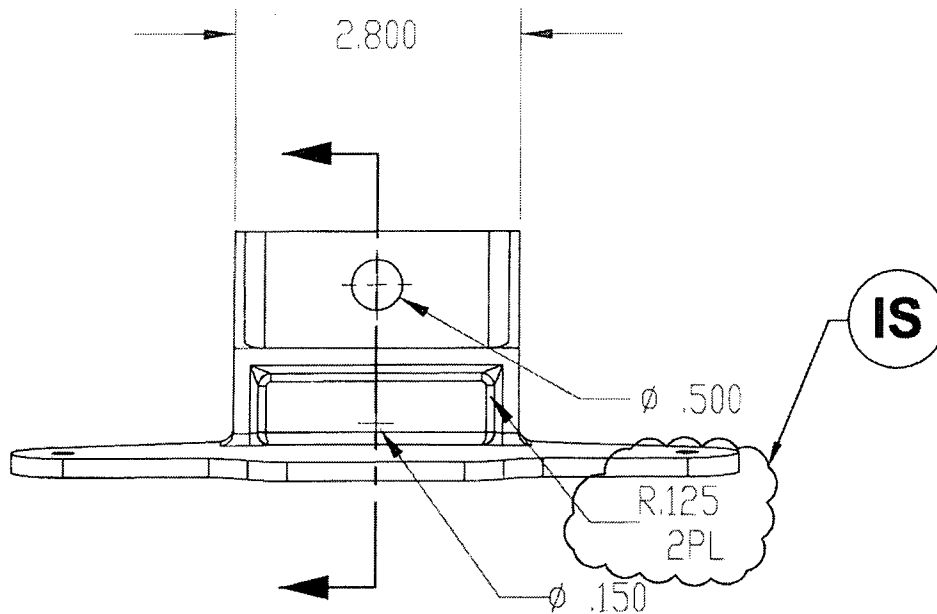
DOCUMENTS EFFECTED:	<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRU <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
---------------------	--	---	--

94459

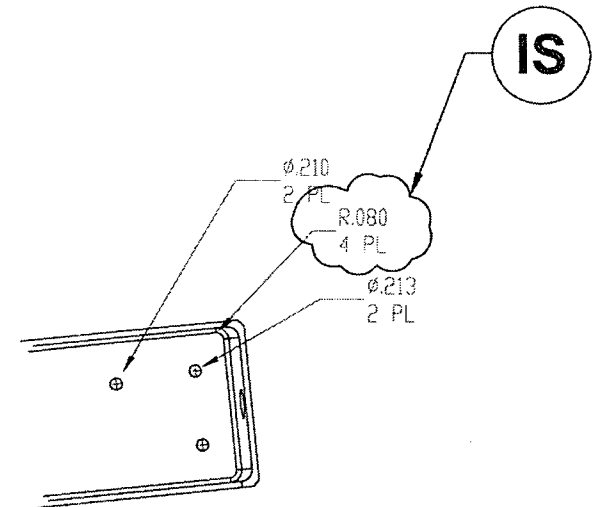
APICAL INDUSTRIES, INC.

ENGINEERING CHANGE ORDER NO. 03706

SHEET 2 OF 2



SHEET 8, ZONE B6 IS:



SECTION P-P

SHEET 8, ZONE B8 IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
-----	----	-------------	-----	-------------	------------------------

APICAL
INDUSTRIES, INC.

SHEET 1 OF 2

DWG NO. 647,9300

REV: N/C

PREPARED BY A. QUAN

DATE: 11/09/11

EFFECT ON DWG
<input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.

DWG TITLE: BRACKET

APPROVED BY:

ENGR

MFG

QC✓

EFF

CURRENT ORDER AND STOCK

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED HOLE LOCATIONS ON 647.9314, ADDED HOLE 647.9315

SHEET 1, ZONE B3:

NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.

2 FINISH: HARD ANODIZE IAW MIL-A-8825 TYPE II, CLASS 2, COLOR: BLACK;
PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-33377J TYPE I, CLASS N

2. FEELER AND BREAK ALL SHARP EDGES

4 IDENTIFY LAW MFG-120 LASER ENGRAVE CENTURY GOTHIC 12 POINT P/N AND REVISION

△ PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 6479310 LH BRACKET SUPRT. LAST MODIFIED 06-22-10

6 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 647.9311 SUPPORT BRACKET(S) OPRT, LAST MODIFIED 06-22-10

2 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 6479312-BRACKETSL00R1, LAST MODIFIED 06-22-10

8 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: B479313 BRACKET.DWG.PRT, LAST MODIFIED: 06-22-10

9 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 6479314 RETAINER BRACKET SLDRPT, LAST MODIFIED 09-26-11

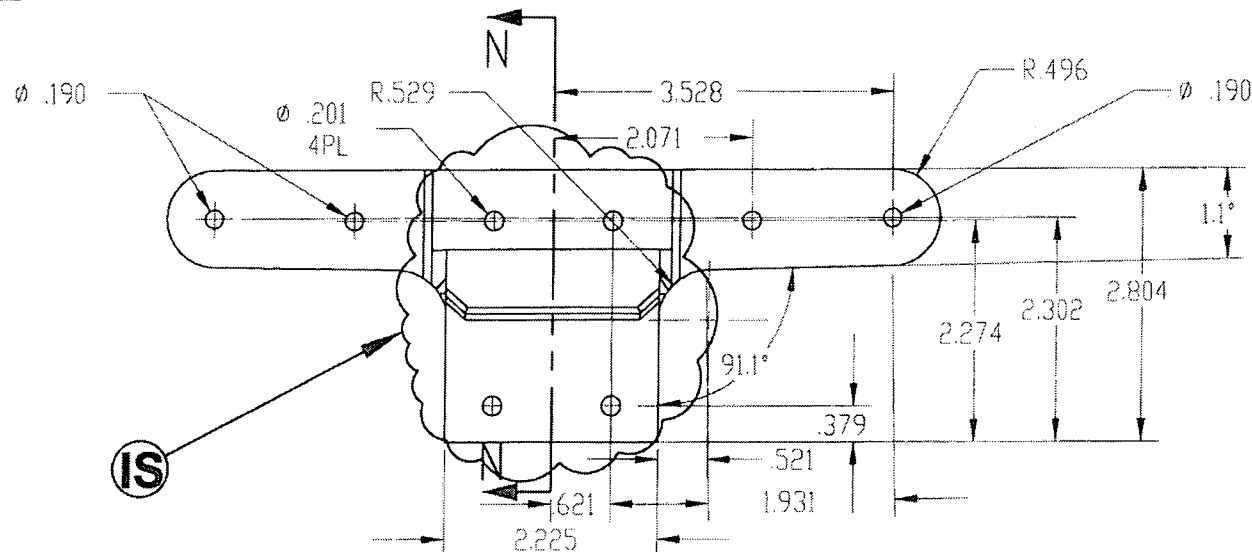
10 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 6479315 RECEPTACLE BRACKET.SLDPRT, LAST MODIFIED 10-19-11

ALL PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 6479516 CROSSBAR BRACKET (LDPRT), LAST MODIFIED: 06

PART DIMENSIONS CONTROLLED BY CAD MODEL FILE 6479317 RH BRACKET.SLDPRT, LAST MODIFIED 06-22-10



SHEET 7, ZONE B4:

























F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

1. The first part of the document is a letter from the author to the reader, explaining the purpose of the study and the methods used. The letter is dated 1968 and is addressed to the reader.

[illegible]

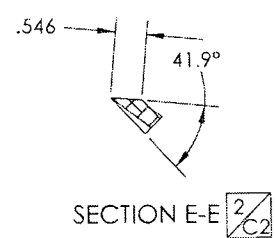
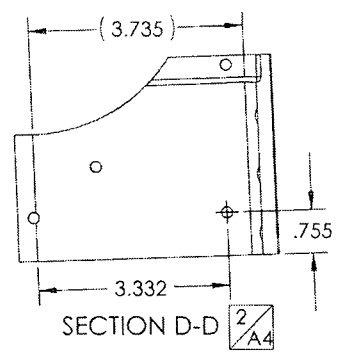
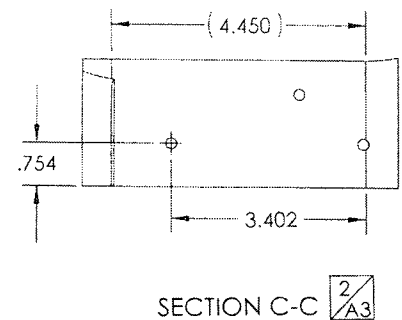
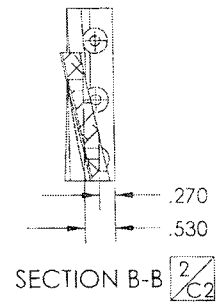
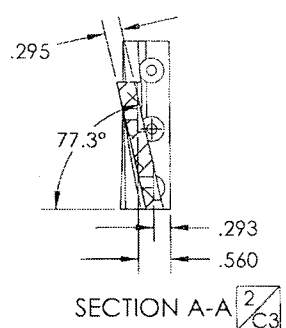
- 03209 03706

	647.9316	RH BRACKET		
	647.9316	CROSSBAR BRACKET		
	647.9315	RECEPTACLE RETAINER BRACKET		 
	647.9314	BRACKET		 
	647.9313	BRACKET		 
	647.9312	BRACKET		 
	647.9311	SUPPORT BRACKET		 
	647.9310	LH BRACKET		 
FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY		PARTS LIST		
NEXT ASSY IS:		APICAL INDUSTRIES		
647.8900	ORIGINAL DATE 11/20/81 12:51 R. KINGSLEY OF BRAVO DRAWING APPROVAL 11/22/81 10:30 COMPLETE	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
		BRACKETS		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS .015 2 PLACE DECIMALS .010 3 PLACE DECIMALS .005		NET CAGE CODE B 07X762	DWG. NO. 647.9300	REV. 1/81
		SCALE NONE		
		SHEET 1 OF 9		

94459

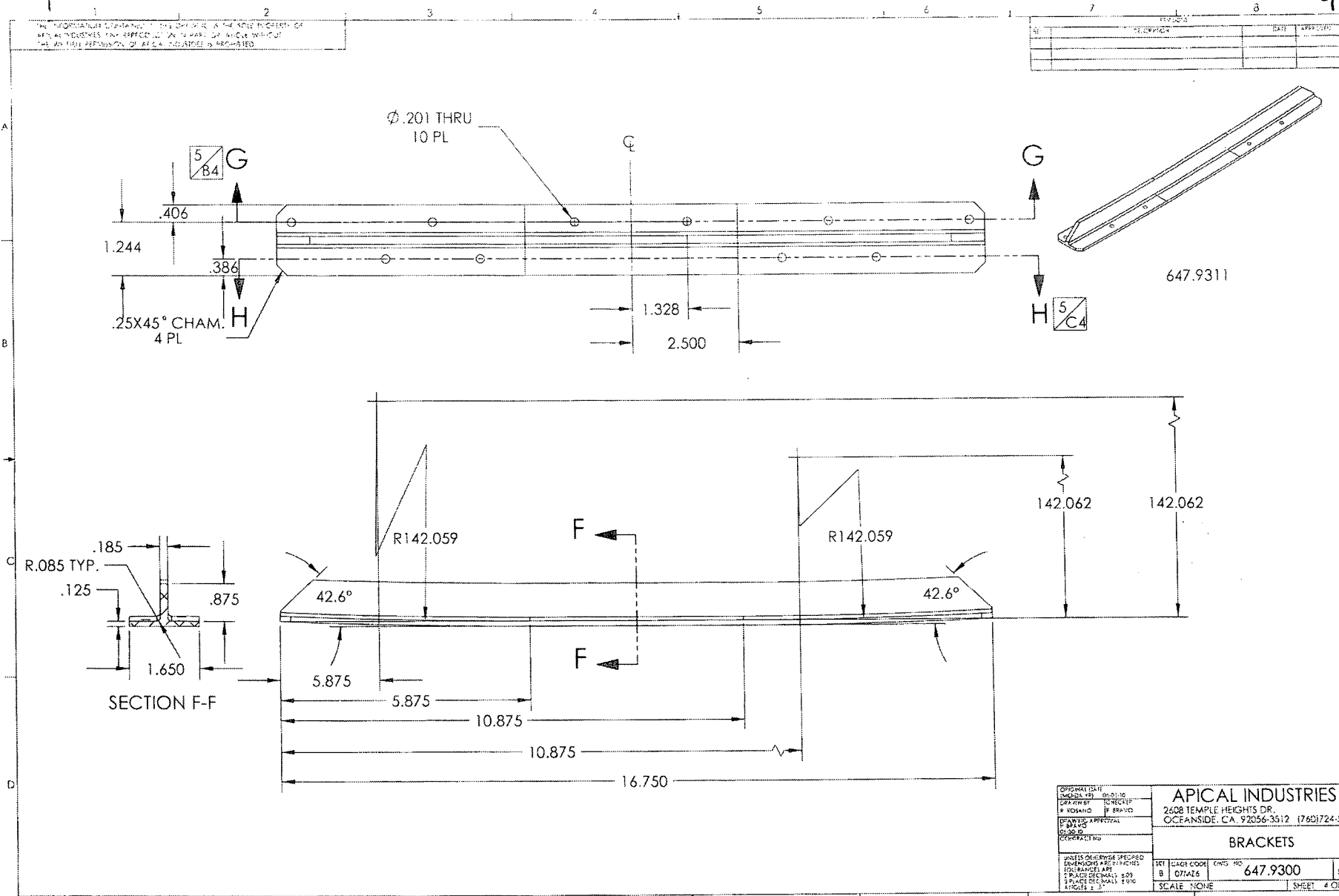
NO DIMENSIONS SHOWN ON THIS DRAWING ARE TO BE CONSIDERED FINAL UNLESS SPECIFICALLY NOTED OTHERWISE. APICAL INDUSTRIES AND ITS EMPLOYEES SHALL BE RESPONSIBLE FOR THE ACCURACY OF ALL DIMENSIONS AND TOLERANCES.

REV	DATE	BY	APP'D



ORIGINAL DATE: 08/10/00		APICAL INDUSTRIES	
DESIGNED BY: P. ROYAL		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: P. ROYAL		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: P. ROYAL		BRACKETS	
CONTRACT NO. 0000000000		SCALE: NONE	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS .001 ANGLES .5°		REV: 07/02/00	REV: 11/01/00
CAGE CODE: 647.9300		SHEET 3 OF 9	

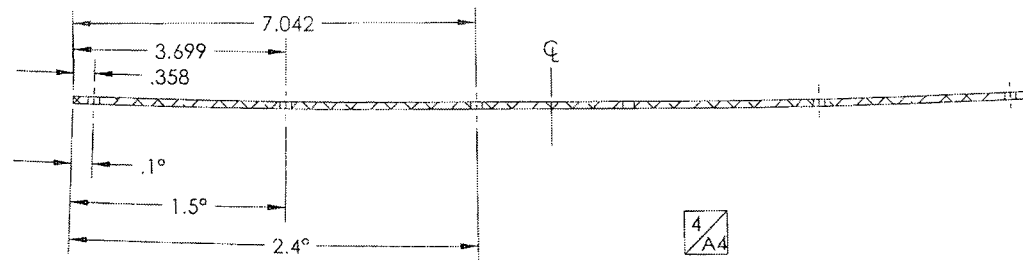
94459



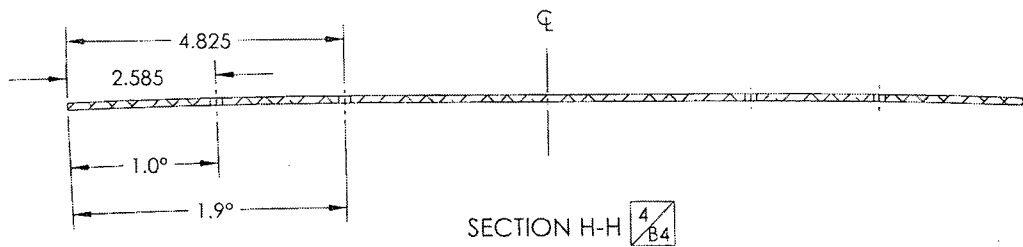
94459

ALL DIMENSIONS ARE SHOWN IN THE SCALE PROJECTION OF
 VERTICAL AND HORIZONTAL PLANS AND ELEVATIONS UNLESS
 OTHERWISE SPECIFIED IN THE NOTES.

DATE	BY	CHKD	APP'D



SECTION G-G

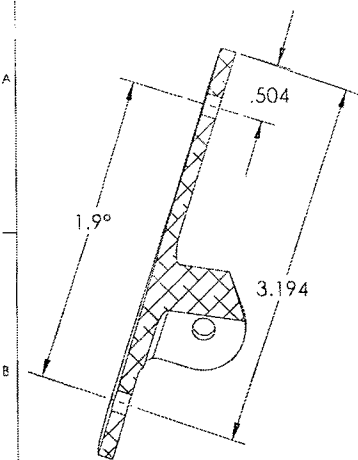


SECTION H-H

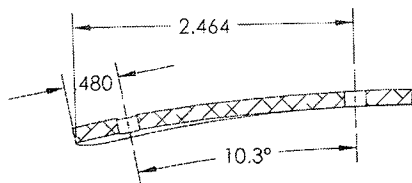
PROJECT DATE DESIGNED BY DRAWN BY CHECKED BY IN CHARGE APPROVED BY DATE CONTRACT NO.	05-01-10 CHESTER 11-11-10 11-11-10 11-11-10 11-11-10 11-11-10	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
BRACKETS		
SHEET CHANGES SHEETED DIMENSIONS ARE IN INCHES TOLERANCES ARE FRACTIONS DECIMALS ±.01 ANGLES ±.5°	SHEET CODE B 07A26	DWG NO. 647.9300
SCALE NONE		REV N/C
SHEET 5 OF 9		

94459

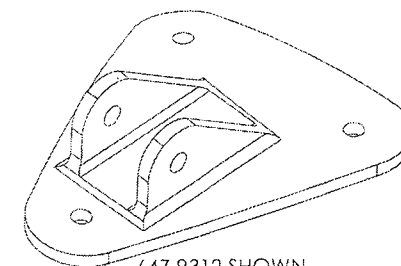
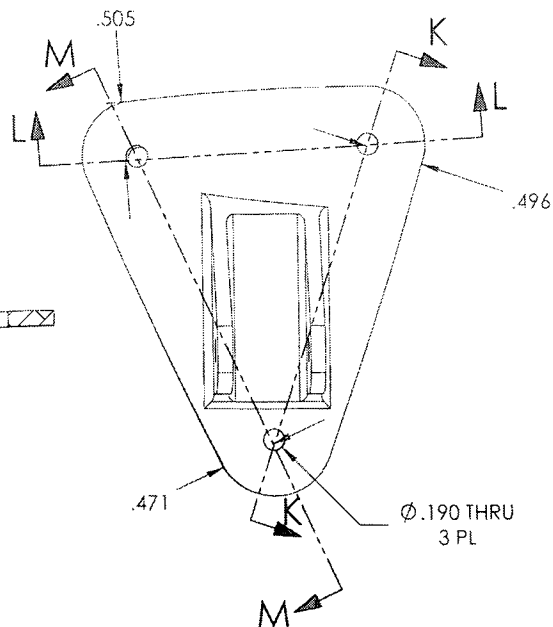
THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE
 UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES
 UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES



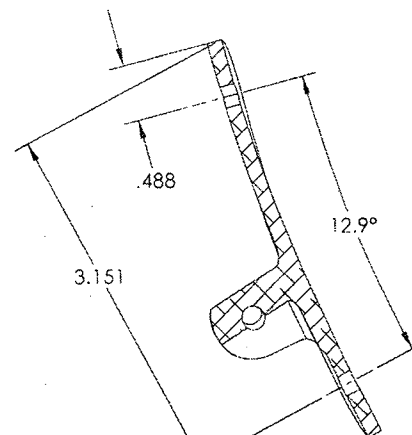
SECTION K-K



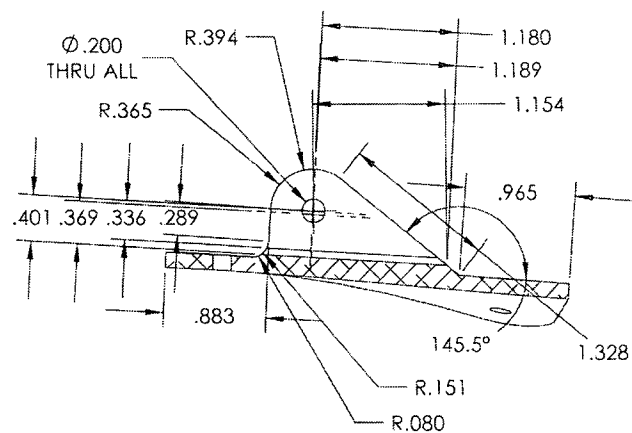
SECTION L-L



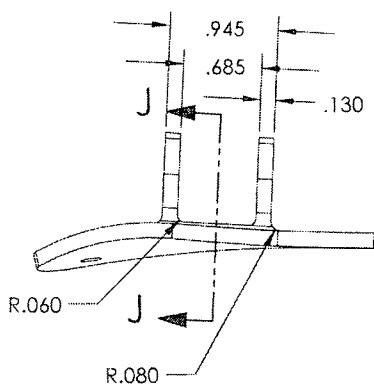
647.9312 SHOWN
 647.9313 OPPOSITE



SECTION M-M



SECTION J-J



PARIS LIST			
APICAL INDUSTRIES			
2608 TEMPLE HEIGHTS DR.			
OCEANSIDE, CA. 92056-3512 (760)724-5300			
BRACKETS			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ±.01 DIMENSIONS ±.01	REV	DATE	BY
	B	07M16	N/C
SCALE NONE	SHEET 6 OF 9		

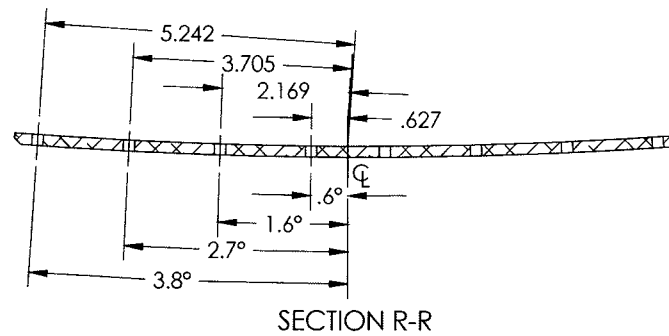
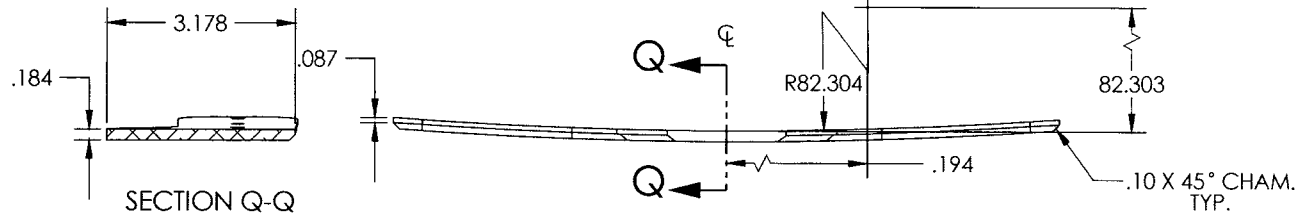
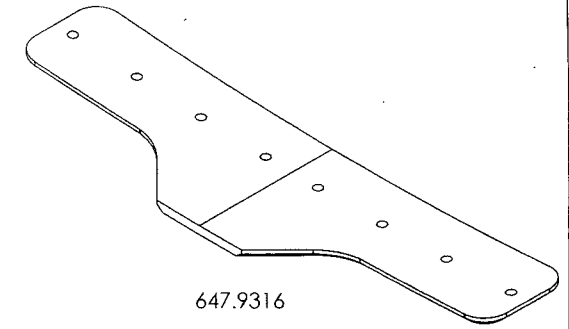
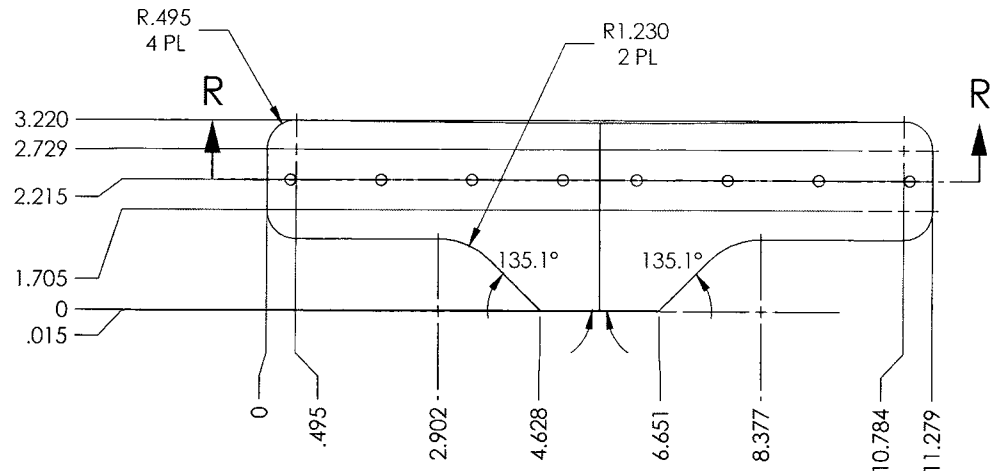
THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF
AFRICAN, INC. AND NO INFORMATION IS TO BE DISCLOSED WITHOUT
THE WRITTEN PERMISSION OF AFRICAN INDUSTRIES, INC.

[illegible]

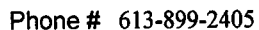
94459

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE (DD-MM-YY) 06-01-10	APICAL INDUSTRIES		
DRAWN BY R. ROSANO	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
CHECKED BY P. BRAVO	BRACKETS		
DRAWING APPROVAL P. BRAVO			
DATE 06-30-10			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.03 3 PLACE DECIMALS ±.010 ANGLES ±.3°	SIZE B	CAGE CODE 07M26	DWG. NO. 647.9300
	SCALE NONE		REV. N/C
			SHEET 9 OF 9



Date	Invoice #
5/30/2013	539

Ship To
Main Finished Goods Location Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7

P.O. No.	Ship	Via	FOB	Project
19277	5/30/2013	delivered	Archer	

[illegible]



2228 Gladwin Cres.
Ottawa, Ont.
K1B 4S6


Telephone (613) 899-2405
Fax (613) 226-1719

Certificate of Compliance

To:
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury Ont.
K6A 1K7

Po Number	Part Number	Quantities
19277	647.9313	30

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 19277 issued by Dart Aerospace Inc.



Andrew Malcolm
Inspector
Archer Precision Inc.
2228 Gladwin Cress.
Ottawa, Ontario
K1B 4S6



Inspection Report

Customer Name Dart Aerospace			QTY 30	DWG # 647.9313		REV. N/C	Part Name BRACKETS			Date ASAP	Lot#	Job # 731-9		
Page 1 of		Inspection Interval		Special Notes										
Item #	DWG. Dim	Tolerance	Operator First Off	QA First A R	QA Final A R	2	3	4	5	6	7	8	9	10
	Rev	N/C	/	/										
	MAT	SUPPLIED	/	/										
	SUB	-												
	Deburr	YES	/	/										
1	.504	±.01	PP	/										
2	1.9°	±.5°	PP	/										
3	3.194	±.01	PP	/										
4	2.464	±.01	PP	/										
5	.480	±.01	PP	/										
6	10.3°	±.5°	PP	/										
7	.505	±.01	PP	/										
8	.496	±.01	PP	/										
9	Ø.190	±.01	.191	/		.191	.191	.191	.191	.192	.191	.191	.191	.191
10	THRU	-	/	/										
11	3X	-	/	/										
12	.471	±.01	PP	/										
13	.488	±.01	PP	/										
14	3.151	±.01	PP	/										
15	12.9°	±.5°	PP	/										
16	.945	±.01	.943°	/		0.940	0.940	0.9415	.940	.941	.941			
17	.685	±.01	.6845	/		0.685	0.684	0.685	.683	.684	.684			
18	.130	±.01	.129	/		0.128	0.128	0.127	.127	.127	.127			
19	R.080	±.01	PP	/										
20	R.060	±.01	PP	/										
21	1.328	±.01	PP	/										
22	145.5°	±.5°	PP	/										

[illegible]



Inspection Report

Customer Name Dart Aerospace		QTY 30	DWG # 647.9313	REV. N/C	Part Name BRACKETS	Date ASAP	Lot#	Job # 731-9
Page 1 of	Inspection Interval	Special Notes						

Item #	DWG. Dim	Tolerance	Operator First Off	QA First A R	QA Final A R	12	13	14	15	16	17	18	19	20
	Rev	N/C	✓	✓	✓									
	MAT	SUPPLIED	✓	✓	✓									
	SUB	-												
	Deburr	YES	✓	✓	✓									
1	.504	±.01	PP	✓	✓									
2	1.9°	±.5°	PP	✓	✓									
3	3.194	±.01	PP	✓	✓									
4	2.464	±.01	PP	✓	✓									
5	.480	±.01	PP	✓	✓									
6	10.3°	±.5°	PP	✓	✓									
7	.505	±.01	PP	✓	✓									
8	.496	±.01	PP	✓	✓									
9	Ø.190	±.01	.191	✓	✓	.191	.191	.191	.191	.191	.191	.191	.191	.191
10	THRU	-	✓	✓	✓									
11	3X	-	✓	✓	✓									
12	.471	±.01	PP	✓	✓									
13	.488	±.01	PP	✓	✓									
14	3.151	±.01	PP	✓	✓									
15	12.9°	±.5°	PP	✓	✓									
16	.945	±.01	.944	✓	✓	.941	.941	.940	.941	.941	.940	.940	.940	.940
17	.685	±.01	.685	✓	✓	.684	.684	.684	.684	.684	.684	.684	.684	.684
18	.130	±.01	.128	✓	✓	.127	.127	.128	.127	.127	.127	.128	.127	.127
19	R.080	±.01	PP	✓	✓									
20	R.060	±.01	.062	✓	✓									
21	1.328	±.01	PP	✓	✓									
22	145.5°	±.5°	PP	✓	✓									

[illegible]



Inspection Report

Customer Name Dart Aerospace			QTY	DWG # 647.9313		REV. N/C	Part Name BRACKETS			Date	Lot#	Job #				
Page 1 of		Inspection Interval		Special Notes												
Item #	DWG. Dim	Tolerance	Operator First Off	QA First A R		QA Final A R		22	23	24	25	26	27	28	29	30
	Rev	N/C	✓	✓		✓										
	MAT	SUPPLIED	✓	✓		✓										
	SUB	-														
	Deburr	YES	✓	✓		✓										
1	.504	±.01	PP	✓		✓										
2	1.9°	±.5°	PP	✓		✓										
3	3.194	±.01	PP	✓		✓										
4	2.464	±.01	PP	✓		✓										
5	.480	±.01	PP	✓		✓										
6	10.3°	±.5°	PP	✓		✓										
7	.505	±.01	PP	✓		✓										
8	.496	±.01	PP	✓		✓										
9	Ø.190	±.01	.191	✓		✓		.191	.191	.191	.191	.191	.191	.191	.191	.191
10	THRU	-	✓	✓		✓										
11	3X	-	✓	✓		✓										
12	.471	±.01	PP	✓		✓										
13	.488	±.01	PP	✓		✓										
14	3.151	±.01	PP	✓		✓										
15	12.9°	±.5°	PP	✓		✓										
16	.945	±.01	.941	✓		✓		.941	.940	.941	.941	.941	.941	.940	.939	.940
17	.685	±.01	.683	✓		✓		.683	.684	.683	.684	.684	.684	.684	.684	.683
18	.130	±.01	.127	✓		✓		.127	.127	.127	.127	.127	.127	.127	.127	.127
19	R.080	±.01	PP	✓		✓										
20	R.060	±.01	PP	✓		✓										
21	1.328	±.01	PP	✓		✓										
22	145.5°	±.5°	PP	✓		✓										

[illegible]

SPACE

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO19277

Purchase Order Date 3/7/2013

PO Print Date 5/30/2013

Page Number 2 of 3

Order From :

VC-GLO001

ARCHER PRECISION INC.
2228 GLADWIN CRESENT
OTTAWA, ON K1B 4S6
CA

Contact Name		Buyer	Brigitte Golden
Vendor Phone	613 899 2405	Requisition Nbr	
Vendor Fax		Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

5	647.9312P	Bracket	3/11/2013 Yes	30.00 Each	Day & Ross coll	\$190.0000	\$5,700.00
		Special Inst:	SAME AS ABOVE				
6	647.9313P	Bracket	3/11/2013 No	30.00 Each	Day & Ross coll	\$340.0000	\$10,200.00
		Special Inst:	SAME AS ABOVE				
7	647.9316P	Crossbar Bracket	3/11/2013 Yes	3.00 Each	Day & Ross coll	\$190.0000	\$570.00
		Special Inst:	SAME AS ABOVE				
8	647.9310P	LH Bracket	3/11/2013 Yes	20.00 Each	Day & Ross coll	\$320.0000	\$6,400.00
		Special Inst:	SAME AS ABOVE				
9	647.9613P	RH Aft Wiper Deflector	3/11/2013 Yes	30.00 Each	Day & Ross coll	\$340.0000	\$10,200.00
		Special Inst:	SAME AS LINE 1				
10	647.9611P	LH Aft Wiper Deflector	3/11/2013 Yes	10.00 Each	Day & Ross coll	\$390.0000	\$3,900.00

SP13-6-4

No substitution or deviation without consent.
Certificate of Conformity or Material Certification required. YES NO

Change Nbr: 3

Change Date: 5/30/2013



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62506

Date: 15-Jul-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To


DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 6 PCS D2224 RED ANODIZE MIL-A-8625 TYPE II CLASS 2 1 PC 647.0410 10 PCS 646.3110 20 PCS 646.3712 11 PCS 646.3713 8 PCS 647.9312 <u>30 PCS 647.9313</u> 9 PCS 647.9314 1 PC 647.9317 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N Job: 20130436	Rev:	
Certificate of Conformance			
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.			
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY			
DATE: <u>15/7/13</u>			
CERTIFIED SIGNATURE: <u></u>			
RECEIVER SIGNATURE: _____			

